Colorectal Adenoma – Resection Techniques and Surveillance

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After some years of establishment und evaluation of screening and prevention programmes for several kinds of malignant tumours not all of these programmes could fulfil their initial expectations.

Colorectal cancer (CRC) is one of the most common causes of cancer-related death in Western countries. Colorectal adenomas as the preneoplastic lesions of CRC are frequent and most commonly detected at an age >50 years. They may be detected and removed by colonoscopy and thus present an ideal condition for a successful screening and prevention programme.

A number of trials have demonstrated the efficacy and value of screening colonoscopy and sigmoidoscopy as well as stool tests in reducing the incidence of and mortality due to CRC [1, 2]. However, at least for sigmoidoscopy, the numbers needed to screen in order to avoid one new cancer case are relatively high with 489 in a recent UK study [3] and with 871 in a trial from the USA [4]. The German S3 guideline prefers complete colonoscopy as the standard screening tool for CRC [5]. However, given the continuing high incidence and mortality due to CRC, we are challenged to further improve the detection rate and treatment of precarcinomatous lesions as well as the treatment of early and later stage CRC. This special issue of VISZERALMEDIZIN aims to contribute to the discussion by further illustrating the various aspects of preneoplastic colonic lesions and their prevention and/or treatment with articles by renowned gastroenterologists, surgeons, and pathologists.

Certainly, one of the major challenges of our current screening programmes is the still low acceptance of standard colonoscopy within the general population. Strategies for improvement could include a further increase in public awareness by means of public relations activities, organized national invitation procedures through health care providers as well as

the improvement of alternative screening procedures such as genetic stool tests or virtual colonoscopy. Presumably, a combination of all of the above will provide a significant improvement in the future.

Besides a safe and sparing examination, improvements of the negative predictive value are necessary. Furthermore, improvements in the technical quality of colonoscopes, more awareness of hyperplastic lesions in the right colon, and increased efforts concerning an improved quality of prevention colonoscopies in general will hopefully reduce the frequency of interval carcinoma in the colorectum.

One of the major advantages of colonoscopy is the opportunity to endoscopically remove mucosal polypoid lesions. The efficacy of screening programmes is largely influenced by the frequency and safety when resecting preneoplastic lesions. There is no doubt that adenoma do not need to be removed by surgical resection. However, the thin line between endoscopic resection and surgery seems to run differently depending on the expertise and tradition of the respective institution. Naturally, some very large or recurrent adenoma will require surgical removal even in the future. However, this should be a rare exception since the utilization of endoscopic capabilities for endoscopic removal of colorectal adenoma is the treatment of choice.

According to guidelines for other organs, the curative potential of endoscopic resections for malignant tumours depends on so-called high- or low-risk criteria (T1, V0, L0, Pn0, G1–2, R0). Regarding the infiltration of the submucosa, the risk of lymph node metastasis must be balanced with the risk of colorectal resection. In the case of a sm2 or sm3 infiltration, oncosurgical resection with systematic lymphadenectomy is the treatment of choice.

Against this background endoscopic submucosal dissection (ESD) is restricted to very few indications. Its impact on mor-

bidity is low. Concerning the application of endoscopic mucosal resection (EMR) it is important to know that the majority of perforations (regarded as visible violations of the muscularis) can be managed by endoscopic clipping.

Efficacy and implementation of risk-adapted follow-up examinations seem to be a key problem which needs further scientific evaluation. Limited data, high age of the affected patients, and hereditary character of the disease have to be considered in this regard. Actual recommendations have been published in the recent German guideline [5].

Colorectal surgery has reached a high quality level in Germany in the past decades. It is available countrywide. The high number of laparoscopic and sphincter-preserving resections has led to an improved acceptance among patients and physi-

cians. Nevertheless, the surgical society is undertaking great efforts for an area-wide quality assurance.

Regarding multimodal therapy concepts for rectal carcinoma, which is outside of the focus of this special issue, we refer to current publications. Furthermore, adjuvant chemotherapy of CRC, interventional and surgical therapy of liver metastasis, and systemic chemotherapy contribute to a reduced mortality and an improved survival.

All activities aimed at reducing the incidence, morbidity, and mortality of CRC are linked to each other. They call for an intensive cooperation between gastroenterologists, oncologists, pathologists, radiotherapists, and surgeons. Finally, this interdisciplinary cooperation has excellent chances of influencing treatment reality as well as benefitting the patients.

References

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